

REMARKS

Claims 1-14 are pending in the application. Claims 1 and 8 are independent.

Claim Rejections – 35 U.S.C. § 103

(a) Claims 1-4 and 8-11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Fossum et al. (USP 6,137,100) in view of Nakano et al. (USP 6,094,220). This rejection is respectfully traversed.

In the “Response to Arguments” section of the Office Action, the Examiner alleges that Fossum teaches, in col. 2, lines 33-44 that:

[T]here are the color component filter segments on each pixel are of different colors (spectral bands) and different areas. Fossum has a large blue area (main photo sensitive sell) and at least three smaller areas (auxiliary photosensitive cell), which are green and red. Since the areas and spectral bands are different, the voltage output V_n , is different, which produces different sensitivities.

Applicants respectfully submit that Fossum discloses, in Fig. 1B, a color filter pattern provided with a blue collection area 110 having the largest size, a red collection area 116 having a size smaller than the blue collection area 110, and two green collection areas 112, 114 having the smallest size. The blue collection area 110 is the lowest efficiency color element, and the green collection areas 112, 114 are the most efficient color elements (see col. 2, lines 38-44).

Fossum also discloses, in Fig. 1D, a cross section of Fig. 1B, in which a blue color filter 110 is provided over a blue collection area 162, and a green color filter 112 is provided over a green collection area 160 (see col. 2, lines 52-59).

In other words, the blue collection area, which corresponds to the “main photosensitive cell” according to the Examiner, is provided with the blue color filter 110, and the green collection area, which corresponds to the “auxiliary photosensitive cell” according to the Examiner, is provided with the green color filter 112.

In contrast, in the claimed invention of the present application, a solid-state image sensor includes “a plurality of composite pixels . . . each of which includes a main photosensitive cell and an auxiliary photosensitive cell,” and “only a single color component filter segment” is “positioned in each of said plurality of composite pixels.” Accordingly, Fossum fails to disclose or suggest the “preparing step” as recited in claim 1.

Nakano merely discloses, in Fig. 1, an image pickup element 112 which converts light having passed a lens block 111 into an electric signal (col. 2, lines 18-22) and fails to disclose or suggest the “preparing step” as recited in claim 1.

Therefore, even assuming, arguendo, that Fossum and Nakano can be combined, Fossum in view of Nakano fails to disclose or even suggest the “preparing step” as recited in claim 1.

The Examiner alleges that the blue collection area 110 corresponds to the “main photosensitive cell” of the claimed invention of the present application because it has the lowest efficiency

Claims 2-4, variously dependent on claim 1, are allowable at least for their dependency on claim 1.

Claim 8 is allowable at least for the similar reasons as stated in the foregoing with respect to claim 1.

Claims 9-11, variously dependent on claim 8, are allowable at least for their dependency on claim 8.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

(b) Claims 5 and 12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Fossum in view of Nakano, and further in view of Nakata et al. (USP 6,747,696). This rejection is respectfully traversed.

Claim 5, indirectly dependent on claim 1, is allowable at least for its dependency on claim 1.

Claim 12, indirectly dependent on claim 8, is allowable at least for its dependency on claim 8.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

(c) Claims 6-7 and 13-14 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Fossum in view of Nakano, and further in view of Ng et al. (USP 5,699,102). This rejection is respectfully traversed.

Claims 6-7, variously dependent on claim 1, are allowable at least for their dependency on claim 1.

Claims 13-14, variously dependent on claim 8, are allowable at least for their dependency on claim 8.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

Conclusion

Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and allowance of the pending claims in the present application are respectfully requested.

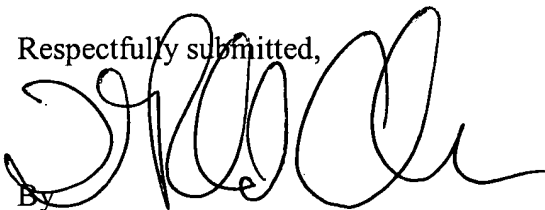
The Examiner is respectfully requested to enter this Reply After Final in that it raises no new issues. Alternatively, the Examiner is respectfully requested to enter this Reply After Final in that it places the application in better form for Appeal.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Maki Hatsumi (#40,417) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or to credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Dated: December 21, 2005

Respectfully submitted,



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